AMENDMENTS TO THE CLAIMS

Please amend the claims as follows.

1. (Original) A drive unit for automatically actuating a vehicle door, in particular the tailgate of a motor vehicle, it being possible to connect the drive unit (4) to the vehicle door (1) or to a transmission device (6) by means of an output shaft (5), said transmission device executing a pivoting movement which corresponds to the pivoting movement of the vehicle door (1), and the drive unit (4) comprising at least one first sensor device (7) which can be connected to an electronic evaluation device (21) and serves to detect the respective angular position of the vehicle door (1), having the following features:
   a) the first sensor device (7) comprises a rotation angle measuring device for detecting the absolute value of at least three mutually adjacent pivot angle ranges ($_{\alpha}1$-$_{\alpha}4$) of the vehicle door (1), these pivot angle ranges covering the entire pivot angle ($_{\alpha}$) between the closed position (I) of the vehicle door (1) and the opened position (II) of the vehicle door, and
   (b) the drive unit (4) comprises at least one second sensor device (9) which has at least one incremental measured value detector for measuring the relative position of the output shaft (5) of the drive unit(4) in relation to the start or the end of the respective pivot angle range (α_1, α_2, α_3).

2. (Original) The drive unit as claimed in claim 1, characterized in that the first sensor device (7) for detecting the absolute value of the pivot angle ranges (α_1, α_2, α_3) of the vehicle door (1) is arranged on the output shaft (5) of the drive unit (4) and detects its pivoting movement.

3. (Original) The drive unit as claimed in claim 1, characterized in that, in the case of a drive unit (4) with a plurality of gear stages (10, 12) arranged in series, the first sensor device (7) is arranged between two gear stages (10, 12), and in that an additional gear mechanism (30) is provided and has an output device which executes a rotary movement which can be detected by the first sensor device (7) and is analogous to the output shaft.

4. (Currently Amended) The drive unit as claimed in claim 2 ~~or 3~~, characterized in that the first sensor device (7) comprises at least one first magnet disk (14; 14') which is arranged on the output shaft (5) of the drive unit (4) or on the output device of the additional gear mechanism (30) and, as seen in the circumferential direction, has at least two magnetic regions (15, 16; 26, 27) of differing polarity, and comprisee at least two magnetic field sensors (17-19; 28, 29) which scan the magnetic regions (15, 16; 26, 27) of the magnet disk (14; 14'), the magnetic regions (15, 16; 26, 27) of the magnet disk (14; 14') and the magnetic field sensors (17-19; 28, 29) being arranged with respect to one another in such a way that, when the output shaft (5) of the drive unit (4) or the output device of the additional gear mechanism(30) rotates from the starting opsition to the end position and vice versa, at least three mutually adjacent angle ranges ($_{\alpha}1$-$_{\alpha}4$) are produced, with, for each angle range ($_{\alpha}1$-$_{\alpha}4$), magnetic field sensors (17-19; 28, 29) being associated with the magnetic regions (15, 16; 26, 27) in a different manner which is characteristic of this angle range.

5. (Original) The drive unit as claimed in claim 4, characterized in that the number and arrangement of the magnetic regions (15, 16; 26, 27) of the magnet disk (14; 14') and the magnetic field sensors (17-19; 28, 29) are chosen in such a way that, when the output shaft (5) of the drive unit (1) or the output device of the additional gear mechanism (30) rotates from its starting position to its end position, the absolute values of at least four mutually adjacent pivot angle ranges ($_{\alpha}1$-$_{\alpha}4$) can be detected.

6. (Original) The drive unit as claimed in claim 5, characterized in that the two magnetic regions (15, 16) of differing polarity are sector-like and the magnetic field sensors (17-19) are arranged next to one another in such a way that the magnetic field of the first magnetic region (16) is initially applied to all three magnet field sensors (17-19) in the starting position and, when the output device of the additioanl gear mechanism (30) rotates, the magnetic field sensors (17-19) trhen successively move into the second magnetic region (15).

7. (Currently Amended) The drive unit as claimed in ~~one of claims 4 to 6~~ claim 4, characterized in that the magentic field sensors (28, 29) are arranged along the outer edge of the magnet disk (14') and at a distance from it.

8. (Currently Amended) The drive unit as claimed in ~~one of claims 4 to 6~~ claim 4, characterized in that the magnetic field sensors (17-19) are positioned at a prescribed distance to the side of the magnet disk (14).

9. (Currently Amended) The drive unit as claimed in claim 3 ~~in conjunction with one of claims 4 to 8~~, characterized in that the first magnet disk (14) of the first sensor device (7) is in the form of a swash plate of a swash plate mechanism (30), with the magnet disk (14) being arranged on a cam (32), which is connected to the output shaft (13) such that they rotate together and is in the form of an eccentric, such that it can rotate and in some regions rolls on a ring gear (31) which is fixed to the housing.

10. (Original) The drive unit as claimed in claim 9, characterized in that the second gear stage (12) is a planetary gear whose housing is in the form of a ring gear for the swash plate mechanism.

11. (Currently Amended) The drive unit is claimed ~~in one of claims 4 to 10~~ claim 4, characterized in that the magnet field sensors (17-19; 28, 29) are Hall sensors.

12. (New) The drive unit as claimed in claim 3, characterized in that the first sensor device (7) comprises at least one first magnet disk (14; 14') which is arranged on the output shaft (5) of the drive unit (4) or on the output device of the additional gear mechanism (30) and, as seen in the circumferential direction, has at least two magnetic regions (15, 16; 26, 27) of differing polarity, and comprisee at least two magnetic field sensors (17-19; 28, 29) which scan the magnetic regions (15, 16; 26, 27) of the magnet disk (14; 14'), the magnetic regions (15, 16; 26, 27) of the magnet disk (14; 14') and the magnetic field sensors (17-19; 28, 29) being arranged with respect to one another in such a way that, when the output shaft (5) of the drive unit (4) or the output device of the additional gear mechanism(30) rotates from the starting opsition to the end position and vice versa, at least three mutually adjacent angle ranges ($_{\alpha}$1-$_{\alpha}$4) are produced, with, for each angle range ($_{\alpha}$1-$_{\alpha}$4), magnetic field sensors (17-19; 28, 29) being associated with the magnetic regions (15, 16; 26, 27) in a different manner which is characteristic of this angle range.

13. (New) The drive unit as claimed in claim 12, characterized in that the number and arrangement of the magnetic regions (15, 16; 26, 27) of the magnet disk (14; 14') and the

magnetic field sensors (17-19; 28, 29) are chosen in such a way that, when the output shaft (5) of the drive unit (1) or the output device of the additional gear mechanism (30) rotates from its starting position to its end position, the absolute values of at least four mutually adjacent pivot angle ranges ($_{\alpha}1$-$_{\alpha}4$) can be detected.

14. (New) The drive unit as claimed in claim 12, characterized in that the two magnetic regions (15, 16) of differing polarity are sector-like and the magnetic field sensors (17-19) are arranged next to one another in such a way that the magnetic field of the first magnetic region (16) is initially applied to all three magnet field sensors (17-19) in the starting position and, when the output device of the additioanl gear mechanism (30) rotates, the magnetic field sensors (17-19) trhen successively move into the second magnetic region (15).

15. (New) he drive unit as claimed in claim 5, characterized in that the magentic field sensors (28, 29) are arranged along the outer edge of the magnet disk (14') and at a distance from it.

16. (New) he drive unit as claimed in claim 6, characterized in that the magentic field sensors (28, 29) are arranged along the outer edge of the magnet disk (14') and at a distance from it.

17. (New) The drive unit as claimed in claim 5, characterized in that the magnetic field sensors (17-19) are positioned at a prescribed distance to the side of the magnet disk (14).

18. (New) The drive unit as claimed in claim 6, characterized in that the magnetic field sensors (17-19) are positioned at a prescribed distance to the side of the magnet disk (14).

19. (New) The drive unit as claimed in claim 2, characterized in that the first magnet disk (14) of the first sensor device (7) is in the form of a swash plate of a swash plate mechanism (30), with the magnet disk (14) being arranged on a cam (32), which is connected to the output shaft (13) such that they rotate together and is in the form of an eccentric, such that it can rotate and in some regions rolls on a ring gear (31) which is fixed to the housing.

20. (New) The drive unit as claimed in claim 19, characterized in that the second gear stage (12) is a planetary gear whose housing is in the form of a ring gear for the swash plate mechanism.

21. (New) The drive unit is claimed claim 12, characterized in that the magnet field sensors (17-19; 28, 29) are Hall sensors.